Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A system for automatically warming a grip surface of a vehicle in which the grip surface and rider's hand are exposed to outdoor environmental conditions, ~~the elements,~~ the system comprising:

(a) an electrical power source;

(b) a resistive heating element mounted to the grip surface for warming the grip surface;

(c) an automatic temperature controller comprising a switching means electrically connected in series between the power source and the heating element for switching power on and off to the heating element in response to a temperature feedback signal; and,

(d) a temperature sensor electrically connected to the temperature controller for providing the temperature feedback signal and mounted on the grip surface at a location to measure temperature at an outer surface of the grip surface under a palm, fingers, or palm and fingers of the hand, ~~an interface between the grip surface and the hand,~~ the grip surface and the hand being exposed to the outdoor environmental conditions.

Claim 2 (currently amended): The system according to claim 1, wherein the temperature sensor is embedded within the grip surface proximal the outer surface.

Claim 3 (currently amended): The system according to claim 1, wherein the temperature sensor is affixed to the outer ~~a~~ surface of the grip surface.

Claim 4 (currently amended): The system according to claim 3, wherein the temperature sensor is affixed to the outer surface of the grip surface with an elastic band or rubber or thermoplastic tape.

Claim 5 (currently amended): The system according to claim 1, wherein the grip surface comprises ~~is~~ a set of handlebars.

Claim 6 (currently amended): The system according to claim 5, wherein the set of handlebars comprises a hand grip ~~and the temperature sensor is mounted to the hand grip under the hand~~.

Claim 7 (currently amended): The system according to claim 6, wherein the temperature sensor is embedded within the hand grip proximal the outer surface of the hand grip.

Claim 8 (currently amended): The system according to claim 6, wherein the temperature sensor is affixed to the outer ~~a~~ surface of the hand grip.

Claim 9 (previously presented): The system according to claim 1, wherein the vehicle is a snowmobile, a snow thrower, an ATV or a motorcycle.

Claim 10 (previously presented): The system according to claim 1, wherein the temperature sensor is a thermistor.

Claim 11 (currently amended): A method of controlling a heating element for a grip surface of a vehicle in which the grip surface and a rider's hand are exposed to outdoor environmental conditions, ~~the elements,~~ the vehicle having an electrical power source for providing power to the heating element, the method comprising:

(a) measuring temperature at an outer surface of the grip surface under a palm, fingers, or palm and fingers of the hand, ~~in an interface between the grip surface and the hand,~~ the grip surface and the hand being exposed to the outdoor environmental conditions;

(b) comparing the temperature to set temperature; and,

(c) switching on the power to the heating element when the temperature is lower than the set temperature and switching off the power to the heating element when the temperature is higher than the set temperature.

Claim 12 (previously presented): The method according to claim 11, wherein the set temperature comprises a first set temperature and a second set temperature, and wherein the power to the heating element is switched on when the temperature is lower than the first set temperature, and wherein the power to the heating element is switched off when the temperature is higher than the second set temperature.

Claim 13 (currently amended): The method according to claim 11, wherein the grip surface is a hand grip. ~~the interface is located under the rider's hand between a hand grip of a set of handlebars of the vehicle and the hand.~~

Claim 14 (currently amended): The method according to claim 12, wherein the grip surface is a hand grip. ~~the interface is located under the rider's hand between a hand grip of a set of handlebars of the vehicle and the hand.~~

Claim 15 (currently amended): The method according to claim 14, further comprising the step of selecting the second set temperature prior to measuring the temperature ~~in the interface~~.

Claim 16 (previously presented): The method according to claim 15, wherein the second set temperature is selected to be in a range from 22°C to 28°C.

Claim 17 (currently amended): A system for automatically warming a hand grip of a snowmobile comprising:

(a) an electrical power source;

(b) a heating element mounted to the hand grip;

(c) an automatic temperature controller comprising a switching means electrically connected in series between the power source and the heating element ~~heater coil~~ for switching power on and off to the heating element ~~heater coil~~ in response to a temperature feedback signal; and,

(d) a thermistor electrically connected to the temperature controller for providing the temperature feedback signal, the thermistor mounted on the hand grip at a location to measure temperature at an outer surface of the hand grip under a palm, fingers, or palm and fingers of an operator's hand, ~~an interface between the hand grip and the hand,~~ the hand grip and the hand being exposed to outdoor environmental conditions ~~the elements~~.

Claim 18 (currently amended): The system according to claim 17, wherein the thermistor is located at a front of the hand grip under the ~~an operator's~~ fingers.

Claim 19 (currently amended): The system according to claim 17, wherein the thermistor is embedded within the hand grip proximal the outer surface under the hand.

Claim 20 (currently amended): The system according to claim 17, wherein the thermistor is affixed to the outer ~~a~~ surface of the hand grip under the hand.

Claim 21 (currently amended): The system according to claim 20, wherein the thermistor is affixed to the outer surface of the hand grip with an elastic band or rubber or thermoplastic tape.

Claim 22 (currently amended): The system according to claim 17, wherein the snowmobile has two hand grips and each hand grip has a said heating element ~~both hand grips have heater coils~~ mounted thereto for warming the hand grip.